



Personal Pathways to Success



Preparing all South
Carolina students to
compete in the global
economy

Advisory Committee on Information Resources
South Carolina Commission on Higher Education

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How Can Today's Students Best Prepare for Tomorrow's Opportunities?



What Careers Hold the Most Promise for Personal and Professional Rewards?



What Kind of Graduates Will Contribute Most to the State's Economic Success?



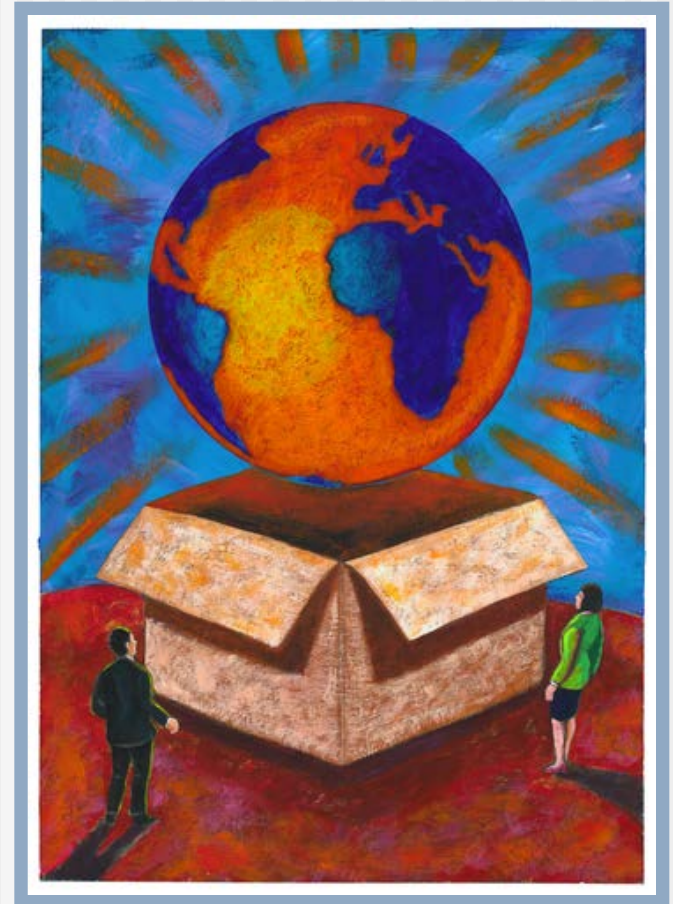
The Challenges:

1. Globalization



The Challenges: Globalization

- Unskilled manufacturing jobs have gone overseas
- Technology now gives skilled workers in other countries the ability to compete with skilled workers here at home



The Challenges: Globalization



- China is now challenging the U.S. in manufacture of computers, airframes, and aeronautical guidance systems
- U.S. trade deficit with China totaled \$161.9 billion in 2004

Source: U.S. Census Bureau, Foreign Trade Division



The Challenges: Globalization

- India is experiencing a boom in IT outsourcing
 - Skilled labor formerly based in U.S. now performed in India
 - Indian technology and IT services exports totaled \$17.2 billion in the year ending March 2005
 - Up 34.5 percent over previous year
- U.S. market accounts for 68 percent of Indian IT services exports

Source: National Association of Software Companies



The Challenges: Globalization

“When I was growing up, my parents used to say to me, ‘Tom, finish your dinner. People in China and India are starving.’ Today I tell my girls, ‘Finish your homework. People in China and India are starving for your jobs.’”

—Thomas Friedman, Author
*The World is Flat: A Brief History of
the Twenty-first Century*



The Challenges:

1. Globalization
2. South Carolina Education Can Improve



Challenges:

South Carolina is a Leader in Education Reform

- No. 1 among the states in SAT improvement (The College Board)
- No. 2 in improving teacher quality (*Education Week* magazine)
- No. 11 in quality of state testing system (*The Princeton Review*)
- No. 12 in raising academic standards (*Education Week*)

But . . .



Challenges:

South Carolina Education Can Improve

- South Carolina still has a significant challenge improving the percentage of students who finish high school

Source: South Carolina Department of Education



Challenges:

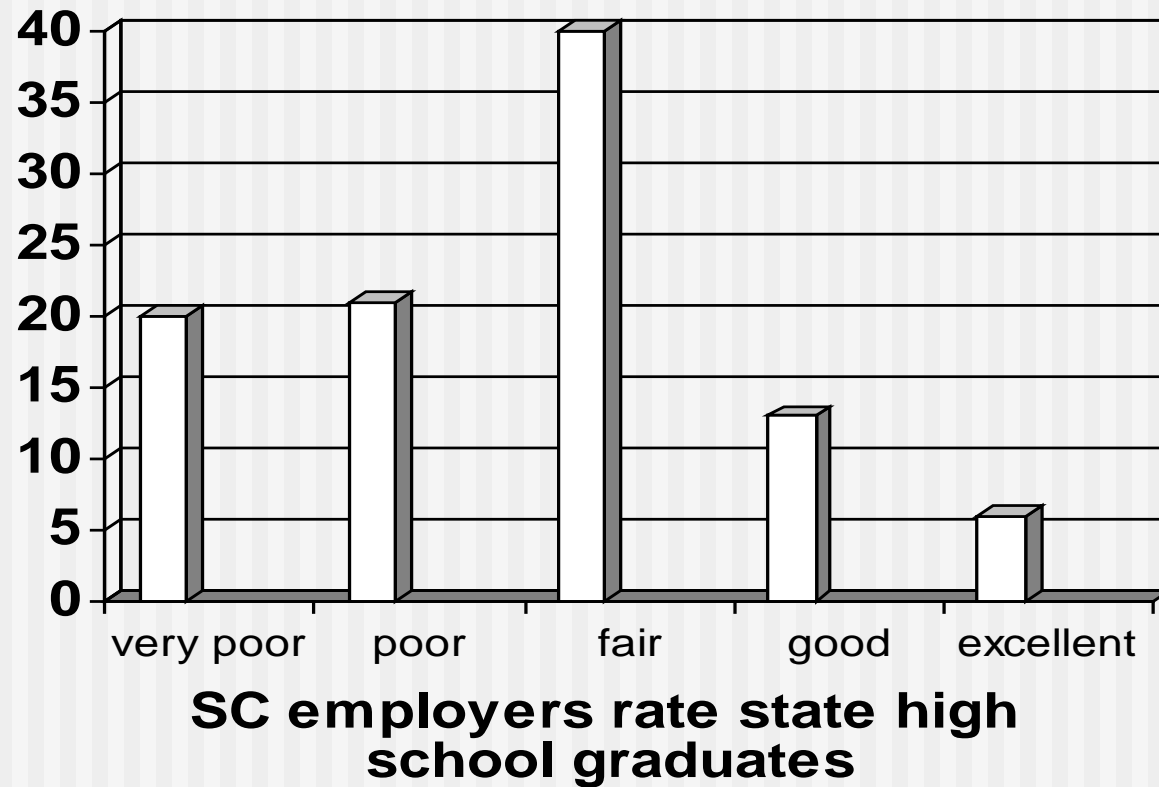
South Carolina Education Can Improve

- Students leave SC schools with substandard reading skills
- Level 3 is the minimum standard for today's labor market
- 52 percent of adult South Carolinians read at levels 1 or 2

Source: National Institute for Literacy

Challenges:

South Carolina Education Can Improve



Source: Skills-that-Work III, 2003



Challenges:

South Carolina Education Can Improve

- “The bottom line: Workers are not ready for the modern workplace. The world of technology requires strong mathematics and science skills, plus the abilities to read, write well, to think and reason, and to explain complex concepts.”

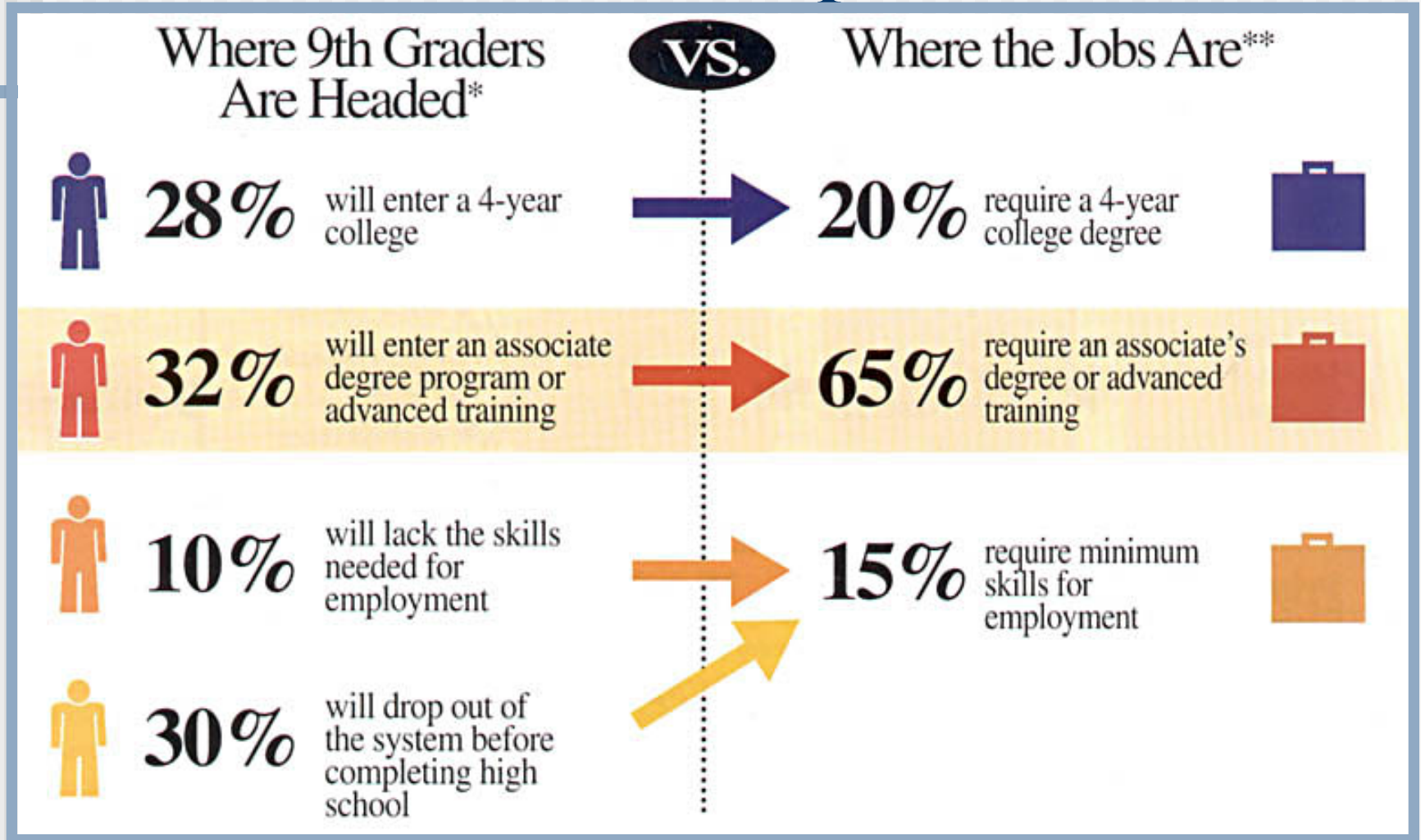
—Mike Watson, Vice Chairman
Bell South Foundation

The Challenges:

1. Globalization
2. South Carolina Education Can Improve
3. The Workforce Gap



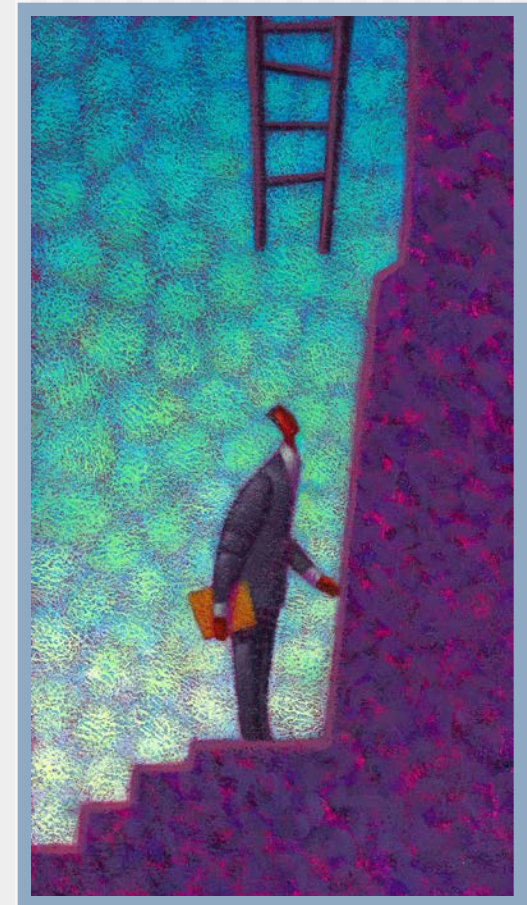
The Workforce Gap



*1998-1999 State Department of Education Special Survey **Source: D'Amico, C. Workforce 2020

Challenges: The Workforce Gap

- 40 percent of SC students will enter the workforce with minimal skills
- Only 15 percent of the jobs available require minimal skills



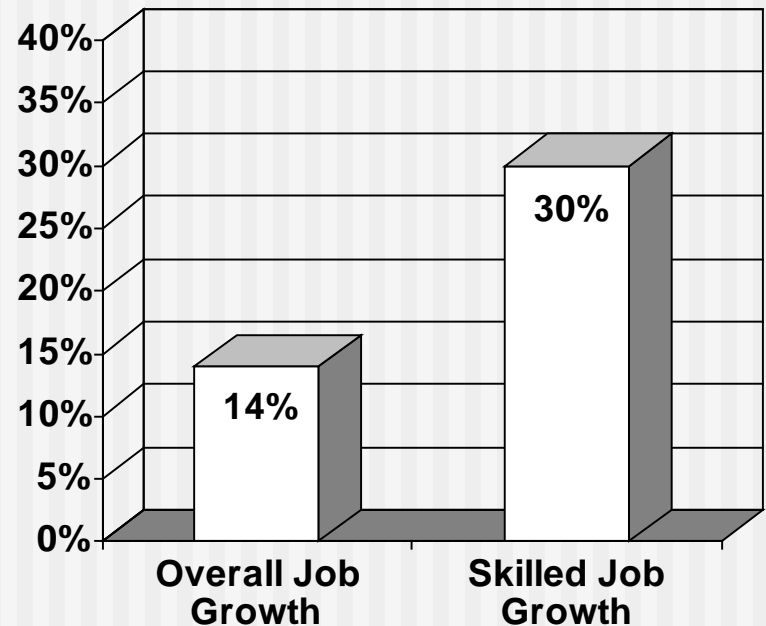


Challenges: The Workforce Gap

- Only 32 percent of SC students will enter a two-year associate degree program or advanced training
- 65 percent of jobs available require two years of postsecondary education—the skilled jobs

Where the Jobs Are

- Overall, U.S. job growth is expected to be 14 percent through 2008
- Growth for jobs that require two-year degrees—skilled jobs—is expected to be 30 percent—or more than twice as fast as the general job growth rate



Source: Bureau of Labor Statistics



Where the Jobs Are

- 90 percent of the fastest growing jobs require technical skills training
 - Computer support specialist
 - Desktop publisher
 - Database administrator
- 48 of the 50 best paying jobs require a minimum of two years postsecondary education

Source: U.S. Department of Labor, Bureau of Labor Statistics

Skilled Jobs Can Pay as Much as Professional Jobs in the Same Field

- Two-year degree required:
 - Medical Database Administrator: **\$59,330**
 - Computer Operations Manager: **\$69,903**
 - Commercial Artist: **\$47,400**
- Four-year degree required:
 - Biomedical Engineer: **\$57,480**
 - Software Engineer: **\$48,837**
 - Writer/Editor: **\$44,137**

Sources: National Institutes of Health Office of Education, “LifeWorks” 2000-2002; salary.com; SCOIS

The Two-Track System

- Traditionally, South Carolina students have chosen from two tracks of study—college prep or career-tech
- College prep led to study at a 4-year college, career-tech to a 2-year technical college or directly to employment

The Two-Track System

- Neither the college prep nor career-tech alone give students what they need, which is:
 - Both academic and career skills
 - Comprehensive career guidance and information
 - Opportunities to explore a wide spectrum of career options
 - Education that prepares them to take advantage of the real opportunities in the job market
 - The chance to find their true callings in life



The Two-Track System

- Too many students leave South Carolina's secondary schools without:
 - The skills employers require—not just the skills needed for school
 - “Soft skills” such as reliability, loyalty, and teamwork
 - Hands-on experience in real work environments
 - Early, intensive career guidance
 - An individual plan to meet evolving goals
 - Motivation to enter postsecondary education

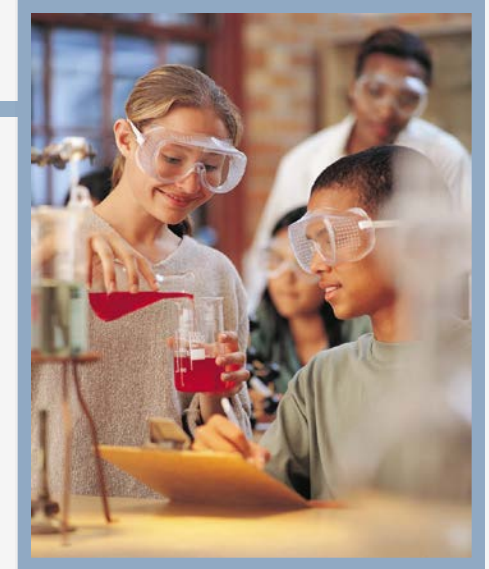
Results of the Two-Track System

- Students have not gotten the mix of education that truly prepares them for postsecondary options
- Students are not being readied for the real opportunities in the job market
- Students are not being started on pathways to success



What Students Really Need to Succeed

- Fundamental academic knowledge
- Excellent technical skills
- Workplace habits that maximize employability
- Flexibility to update or change skills
- It is not a question of college or career education—everyone needs a mix of both based on his or her individual goals



It's Time for a Fresh Approach

- One that integrates both academic and career skills for all students
- One that aligns South Carolina's education system and the demands of the global economy
- One that develops a strong workforce
- One that personalizes education to each student's unique needs
- One that opens up many pathways to success for all South Carolina students
- One that gives all students chances to succeed, choice about direction, and control over their futures

Personal Pathways to Success: A New Vision for Education

- The Education and Economic Development Act (EEDA) of 2005 establishes a new vision for education based on the idea of “Personal Pathways to Success” for all students
- This system integrates academic and career-tech education into a unified system that offers more and better ways for all students to succeed

Integrated Academic/Career Education Works Best

- In study of 11,352 students followed from 1989 to 1992
 - The risk of dropping out was highest among students taking no career course work
 - Lowest risk of dropping out was among students taking a mix of 3 career-tech units for every 4 academic units
- At-risk students who combined academic and career course work graduated at a much higher rate
- Source: Plank, S. University of Minnesota, 2001.

Integrated Academic/Career Education Works Best

- In 1997, all 14 high schools in Berrien County, MI, integrated career and academic education
- Independent evaluation in 2003-04 showed increased

Attendance

Average GPA

State test scores

Upper-level course
taking

AP enrollment

Dual-credit enrollment

Postsecondary
enrollment

Graduation rate

Personal Pathways to Success: A New Vision for Education

- This new integrated approach is really a bundle of millions of personal pathways to success, individually laid out by students, parents, and educators across the state
- Each student has a unique destiny—education's job is to open up opportunities to achieve his or her potential



Why Personal Pathways?

- To ground all students in rigorous academic fundamentals
- To give all students skills relevant to their chosen career paths
- To give all students the guidance they need to plan their individual futures
- To give all students the motivation to stay in school
- To create a workforce tailored to real opportunities in the South Carolina economy
- To create a workforce fully prepared for global competition

The Vision: How Personal Pathways Will Work



Personal Pathways System

- Mandated for all South Carolina schools by the Education and Economic Development Act of 2005
- Institutionalizes best practices already proven to work in the state
- Puts South Carolina at the forefront of the national career clusters movement

Elements of the Education and Economic Development Act

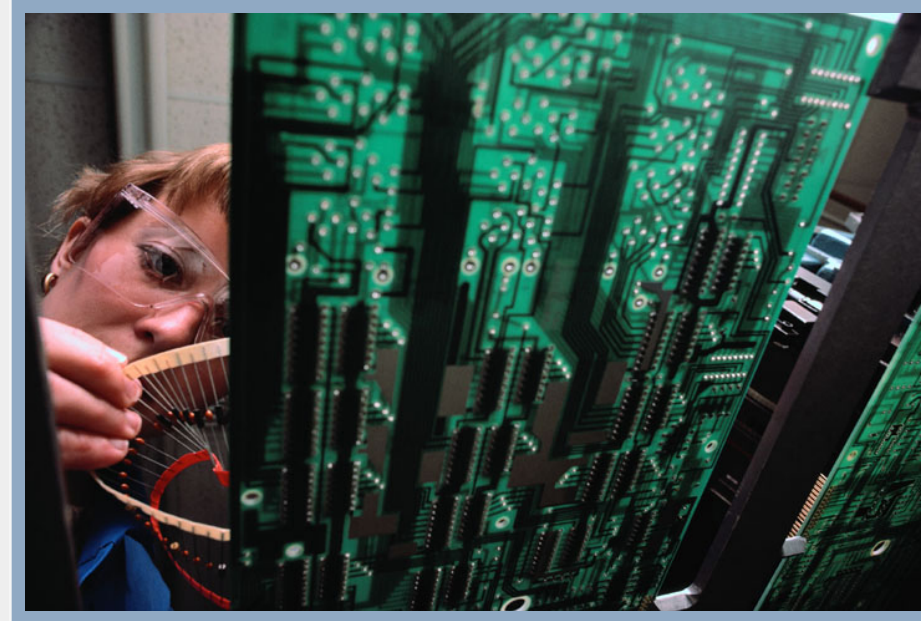
- Help students connect education to careers of their choice
- Require strong academic core courses
- Increase the number of guidance counselors to achieve a 300 students to one counselor ratio
- Establish clusters of study and Individual Graduation Plans (IGPs) for students
- Provide for parental review and approval of IGP with student and counselor
- Identify at-risk students and provide programs to increase graduation rate

Elements of the Education and Economic Development Act

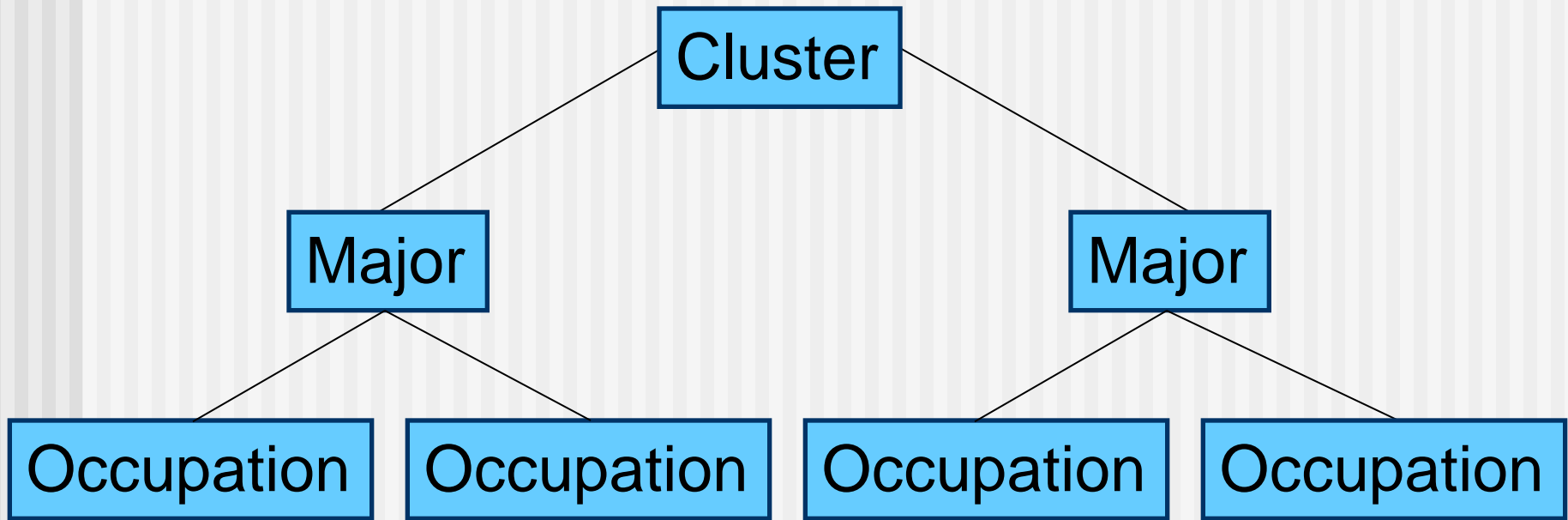
- Align requirements for high school graduation with college entrance
- Establish articulation agreements making K-16 education seamless
- Create dual-enrollment agreements for high school and college coursework
- Create a Coordinating Council to oversee implementation of EEDA

Personal Pathways System

- Organized around 16 Career Clusters
- Career Clusters are broken down into dozens of Career Majors guiding students' high school preparation for specific careers

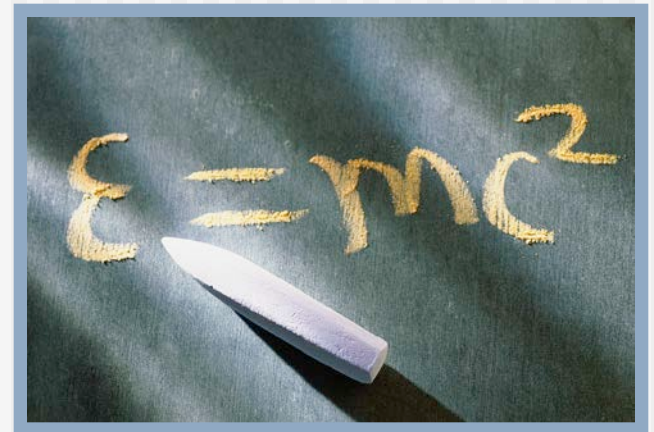


Personal Pathways Structure



What are Career Clusters?

- Groups of related occupations requiring varied skills and education levels
- Educational components aligned with sectors of the South Carolina job market
- Tools for making academic and technical education relevant to future careers
- A seamless way to integrate:
 - instruction
 - guidance
 - transition



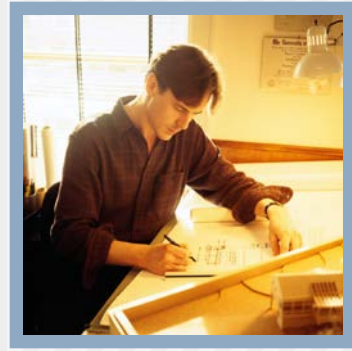
South Carolina's 16 Possible Career Clusters

- Arts, A/V Technology, and Communications
- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Business, Management, and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, and Security
- Manufacturing
- Marketing, Sales, and Service
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

What are Career Majors?

- Clusters break down into Career Majors, which are similar to college majors, but with more flexibility to meet students' evolving interests
- Majors are more specific fields of interest under the broad umbrella of a Career Cluster
- Majors define a course of high school and college study that directs students toward a more specific group of occupations within a cluster
- Each student can select his or her best personal pathway to success

Personal Pathways Structure



Career Cluster

Architecture and Construction

Design/Pre-
Construction

Construction

Maintenance
Operations

Career Majors



How Personal Pathways Work

Steps to Success

Employment: Career Advancement

Continuing Education and Lifelong Learning

Postsecondary: Career Preparation

Achieving credentials: college, certification, apprenticeship, military

9-12: Career Preparation

Academics and technical courses, intensive guidance, individual graduation plans

Grade 8: Transition

Choosing a career cluster and major (can change easily at any time later)

6-8: Career Exploration

Discovering interest areas

K-5: Career Awareness

Introduction to the world of careers

How Personal Pathways Work

- Grades K-5: Career Awareness
 - Introduction to idea of careers and work
 - Introduction to Career Clusters and Career Majors
 - Career days
 - Field trips
 - Learning connection between success in school and success in life



How Personal Pathways Work



- Grades 6-8: Career Exploration
 - More specific exploration of career information
 - Interest inventories
 - Academic assessments
 - Counseling
 - Job shadowing and site visits

How Personal Pathways Work

- Grade 8: Transition
 - Use information gained in awareness and exploration activities
 - Consider personal talents and interests
 - Make initial choice of Career Cluster and Career Major
 - Students are not locked into a choice forever
 - Develop an Individual Graduation Plan (IGP) with parental and adviser support

What is an Individual Graduation Plan (IGP)?

- A document that captures decisions about the direction in which the student wishes to go in high school and postsecondary education
- Specifies cluster, major, postsecondary goals, planned high school schedule, planned out-of-class activities, and more
- Reviewed at least annually throughout high school by students, parents, and guidance counselors
- Puts students and parents in control of education and career decision-making

A Sample Individual Graduation Plan

Cluster of Study: Health Science Major: Health Treatment Specialties

Required Core for Graduation

9		10	11	12
Math--Four Units	Algebra I	Geometry	Algebra II	Pre-Calculus
English--Four Units	English I	English II	English III	English IV
Science--Three Units	Physical Science	Biology	Chemistry or Physics	Physics or Biology II
Social Studies--Three Units	One unit of Social Studies		U.S. History	Economics/ Government
Required Courses for Major--Four Units		Health Science Technology I, II, III, IV		
Complementary Coursework		Anatomy & Physiology, AP Biology, AP Calculus, Emergency Medical Services, Medical Terminology, Sports Medicine		
Career-oriented Learning Opportunities		Career Mentoring, Shadowing, Service Learning, Internship, Cooperative Education, Senior Projects		
Professional Opportunities After Postsecondary Education		2-Year Degree: Dental Hygienist, Paramedic, Registered Nurse 4-Year Degree or Higher: Athletic Trainer, Pharmacist, Physical Therapist, Medical Doctor		

How Personal Pathways Work

- Grades 9-12: Career Preparation
 - Rigorous academics
 - Required academic core and electives remain in place
 - Career major courses chosen from electives
 - Out-of-class learning experiences for all students
- Students can easily change majors as interests and goals evolve

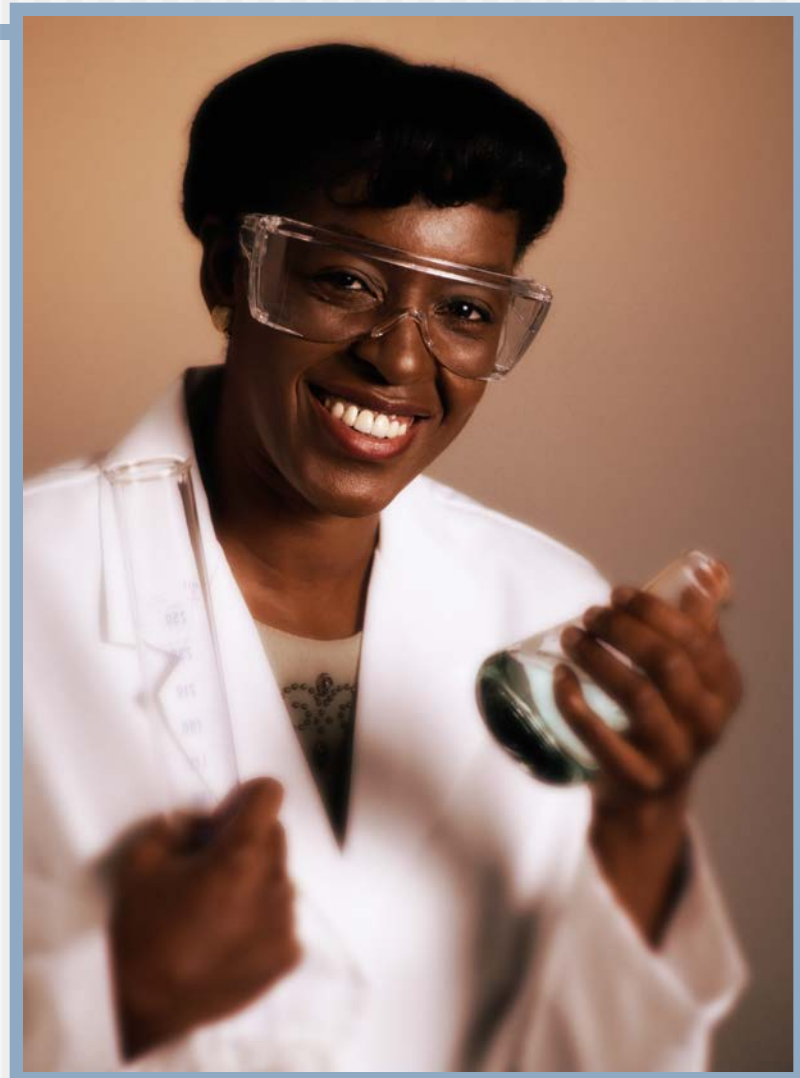


How Personal Pathways Work

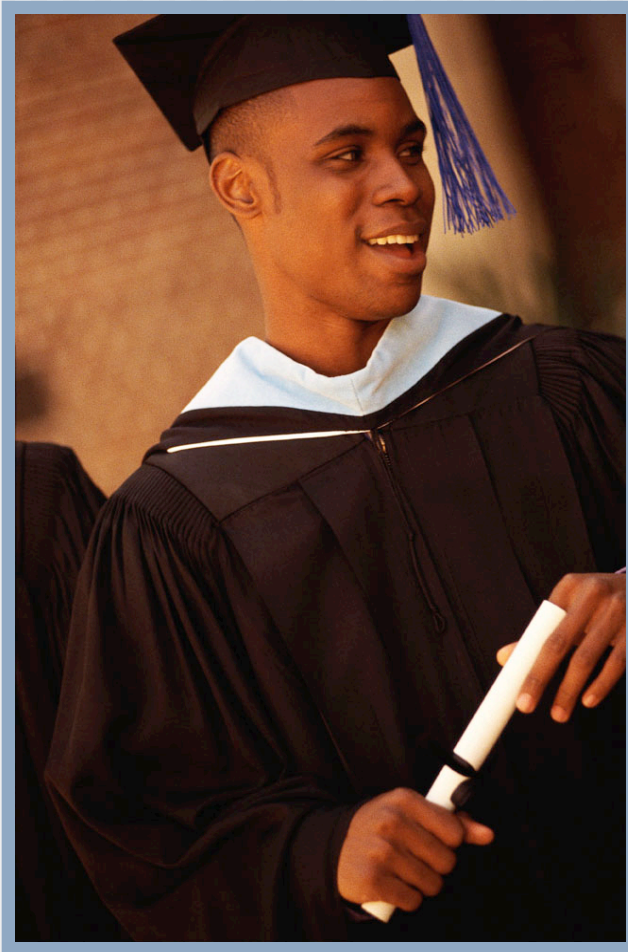
- Grades 9–12: Work-based Learning
- Under the Personal Pathways System, all students engage in work-based learning experiences related to classroom studies:
 - job shadowing
 - internships
 - co-op education
 - service learning
- Real-world work experience complements what students learn in school to reinforce the motivation to achieve

How Personal Pathways Work

- Postsecondary Education:
Continued Career Preparation
 - Four-year college, two-year college, state-approved apprenticeships, the military, or on-the-job training
- Dual credit and other articulation agreements create a seamless path through postsecondary education and into the workforce



How Personal Pathways Work



- Employment:
Career Advancement
 - Continuing education and lifelong learning
- The Personal Pathways System emphasizes that learning never stops

Personal Pathways to Success: Protection Against Tracking

- EEDA includes provisions that protect against students being forced into pathways they and their parents/guardians don't choose
- Parents can designate someone to represent them if they cannot participate in IGP process
- An appeals process will be created to resolve any conflicts
- Every student will have equal access to opportunities

Personal Pathways to Success: Empowering Educators



- The Education and Economic Development Act mandates education in career cluster systems for future and current educators
 - Teachers
 - Administrators
 - Counselors
- Teacher and administrator evaluations include performance in career education and guidance
- In the Personal Pathways system, guidance counselors become coaches and collaborators with teacher-advisers

Personal Pathways to Success: Individual Attention to Students

- Under the Personal Pathways system, more guidance counselors will be hired to achieve a ratio of one counselor for every 300 students
- Career specialists will be hired
- Parent/designee conferences will ensure every student has a say in his or her future
- Students at risk for dropping out identified early
- Model procedures established to help at-risk students graduate

Personal Pathways to Success: Seamless Academic Transitions

- Advisory Committee on Academic Programs will recommend
 - statewide agreements of accepted course credit among high schools, technical colleges, and four-year colleges and universities
 - statewide system of policies and coursework for dual enrollment
- Personal Pathways will help establish seamless educational transitions from K through 16 and beyond

Personal Pathways to Success: Regional Education Centers

- The Personal Pathways system sets up Regional Education Centers
 - Coordinate educational and workforce services
 - Mandated partners:
 - One-stop shops
 - Workforce Investment boards
 - Tech-prep consortia
 - Instructional technology centers
 - Create service centers for lifelong learning

Personal Pathways to Success: Regional Education Centers

- Regional Education Centers will provide
 - Career planning services for students and adults
 - Professional development for educators
 - Resources for employers such as career-oriented learning and training services
 - Business/education community partnerships
 - Workforce education programs

Personal Pathways to Success: High Schools That Work

- Personal Pathways mandates reforming all South Carolina high schools on the High Schools That Work model (or other approved model) by 2010
- Some 65 HSTW schools in SC already
- Maintain closely monitored framework of goals and key practices for accelerating learning
 - Stress education improvement based on 10 key practices, including
 - Required academic core classes
 - High expectations for student academic achievement
 - Out-of-class, work-based learning opportunities

Personal Pathways to Success: High Schools That Work

- HSTW programs shown to reduce drop-out rate
 - At Walhalla High School in Walhalla, SC, drop-out rate fell 38 percent from 1987-88 to 1997-98
 - At Loganville High School in Loganville, GA, the graduation rate increased from 67 percent in 1995-96 to 81 percent in 1998-99

Source: Clearinghouse on Adult, Career, and Vocational Education

Personal Pathways to Success: A Statewide Effort

- The Education and Economic Development Act sets up a statewide council to oversee implementation of Personal Pathways to Success
 - The Education and Economic Development Council is made up of a cross-section of SC education, government, and business leaders
 - Sets up accountability and performance measures
 - Reports annually on progress toward full implementation of Personal Pathways System

A Timeline for Success

- The Education and Economic Development Act mandates full implementation of Personal Pathways to Success by July 1, 2011
 - Education and Economic Development Council in place by October 1, 2005
 - Models for Individual Graduation Plans and cluster curricula developed by July 1, 2006
 - Regional Education Centers set up by July 1, 2006
 - Articulation agreements outline course work for statewide dual enrollment by July 1, 2006
 - All districts to have at least three clusters of study in place by July 1, 2007

A Timeline for Success

- Career awareness and exploration curricula to be in place in grades 1-5 during 2006-07 school year
- Counseling and career awareness programs for grades 6-8 in place by 2006-07, including Individual Graduation Plans for 8th graders
- Student to guidance counselor ratio reaches 300:1 by 2006-07
- Identification of students at risk for dropping out begins by July 1, 2007
- Model programs for helping at-risk students in place by 2007-08
- High Schools That Work (or similar approved model) in place in all high schools by 2009-10

With Personal Pathways to Success, Everybody Wins



Students Win

- Enhances academic achievement by providing real-world relevance
 - Students see a reason to achieve in the classroom
 - Out-of-classroom learning provide valuable career connections with local businesses
 - More students graduate and graduates are better prepared for postsecondary success
- Sets up seamless postsecondary paths and reduces college expenses by doing so
- Offers enhanced guidance and individual planning
- Provides multiple avenues to success



Parents Win



- Gives their children an understanding of the connection between school and success in the real world
- Gives their children a reason to stay in school and achieve
- Increases their involvement in their children's education and career planning
- Ensures dollars invested in postsecondary education are spent most effectively
- Increases their children's opportunities for success in life

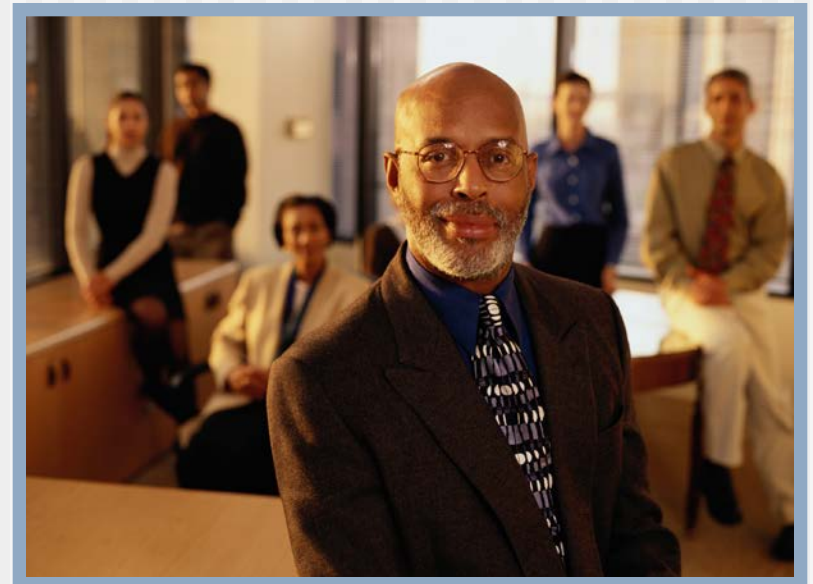
Educators Win



- Empowers educators to help their students connect success in school with success in life
- Creates a seamless system of instruction, guidance, and transition
- Motivates students to achieve
- Allows curricula to be tailored to the needs of the community
- Integrates academics and career education

The Business Community Wins

- Improves the quality of graduates entering the workforce by giving them job-specific skills
- Gives graduates the “soft” skills—professionalism, punctuality, responsibility, reliability—necessary for success
- Facilitates recruiting of new workers and reduces turnover by helping students pinpoint their career interests and talents
- Improves the business climate by promoting economic development



Policymakers Win

- Supports high standards and accountability
- Supports statewide economic development
- Positively addresses problems such as:
 - high school drop-out rates
 - workforce quality

South Carolina Wins

- Uses educational resources more effectively
- Grows a highly qualified workforce
- Expands the state's role as a global competitor that can respond to rapid economic change
- Demonstrates the state's understanding that the key to South Carolina's growth is a well-educated and technically skilled workforce

Personal Pathways Must Be Fully Funded to Work

- The Education and Economic Development Act has passed the General Assembly, but funding has only been provided for the first year
- The General Assembly must decide whether to provide additional funding during the next session to make the system a reality
- The legislature will act if people demand action

What You Can Do to Help

- Open your doors! Every high school student is to have experiences “on-site” within their chosen cluster—from a faculty office at USC to the Wellman plant in Darlington
- Contact policymakers to express support
- Work with all partners to make regional centers a reality
- Spread the word about the EEDA

What You Can Do to Help

- Become an EEDA Ambassador
- Sign up for a speakers bureau of South Carolinians ready to present Personal Pathways to groups in their communities
- Members receive a kit of presentation materials
- Contact John Yates at [jyates@lainecon.com](mailto: jyates@lainecon.com) to join

Together, We Can Make Personal Pathways to Success a Reality



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